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Resolution adopted by the Economic and Social Council on 17 November 2014

[on the recommendation of the Committee of Experts on Global Geospatial Information Management (E/2014/46)]

2014/31. A global geodetic reference frame for sustainable development

The Economic and Social Council,

Reaffirming the purposes and principles of the Charter of the United Nations,

Reaffirming also General Assembly resolution 54/68 of 6 December 1999, in which the Assembly endorsed the resolution entitled "The Space Millennium: Vienna Declaration on Space and Human Development",[1] which included, inter alia, key actions to improve the efficiency and security of transport, search and rescue, geodesy and other activities by promoting the enhancement of, universal access to and compatibility of space-based navigation and positioning systems, including Global Navigation Satellite systems,

Reaffirming further General Assembly resolution 57/253 of 20 December 2002, in which the Assembly endorsed the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation),[2] and means of implementation, which included, inter alia, strengthening cooperation and coordination among global observing systems and research programmes for integrated global observations, taking into account the need for building capacity and sharing of data from ground-based observations, satellite remote sensing and other sources among all countries,

Reaffirming General Assembly resolution 66/288 of 27 July 2012, in which the Assembly endorsed the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want", in which Heads of State and Government recognized the importance of space-technology-based data, in situ monitoring and reliable geospatial information for sustainable development policymaking, programming and project operations,

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* E/2014/1/Rev.1, annex II.

[1] Adopted by the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), held in Vienna from 19 to 30 July 1999 (A/CONF.184/6, chap. I, resolution 1).

[2] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

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Noting its resolution 2011/24 of 27 July 2011, by which the Council established the Committee of Experts on Global Geospatial Information Management, encouraged Member States to hold regular high-level, multi-stakeholder discussions on global geospatial information, including through the convening of global forums, with a view to promoting a comprehensive dialogue with all relevant actors and bodies, and emphasized the importance of promoting national, regional and global efforts to foster the exchange of knowledge and expertise, to assist developing countries in building and strengthening national capacities in that field,

Noting also resolution 1, adopted on 1 November 2012 by the Nineteenth United Nations Regional Cartographic Conference for Asia and the Pacific, held in Bangkok from 29 October to 1 November 2012,[3] in which the Conference, realizing the need to improve the sustainability and capability of the Global Geodetic Observing System and the need to encourage and support the adoption of the International Terrestrial Reference Frame as the foundation reference frame, urged the Committee of Experts to consult with Member States to adopt and sustain the global geodetic reference frame and provide a road map for its implementation, and to participate in and make commitments to the Global Geodetic Observing System to ensure its long-term sustainability,

Noting further decision 3/102, adopted by the Committee of Experts on 26 July 2013,[4] in which the Committee agreed that actions should be taken to facilitate the submission of a resolution to be tabled at the sixty-eighth session of the General Assembly in order to seek support and commitment at the highest level, and requested the Secretariat to establish a working group, with equitable regional representation, to develop the conceptual note and draft text of the resolution through an open and inclusive process,

Recognizing the importance of international cooperation, as no one country can do this alone, to realize the global geodetic reference frame and services to underpin Global Navigation Satellite Systems technology and provide the framework for all geospatial activity, as a key enabler of spatial data interoperability, disaster mitigation and sustainable development,

Recognizing also the economic and scientific importance of and the growing demand for an accurate and stable global geodetic reference frame for the Earth that allows the interrelationship of measurements taken anywhere on the Earth and in space, combining geometric positioning and gravity field-related observations, as the basis and reference in location and height for geospatial information, which is used in many Earth science and societal applications, including sea-level and climate change monitoring, natural hazard and disaster management and a whole series of industrial applications (including mining, agriculture, transport, navigation and construction) in which precise positioning introduces efficiencies,

Recognizing further the extraordinary achievements made by national mapping and space agencies, geodetic commissions, research organizations and universities and other international organizations such as the International Federation of Surveyors, building upon initiatives of the International Association of Geodesy, representing the global geodetic community, in measuring and monitoring changes in the Earth's system on a best-effort basis, including the development of the now adopted International Terrestrial Reference Frame,

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[3] See E/CONF.102/8, chap. IV, sect. B.

[4] See *Official Records of the Economic and Social Council, 2013, Supplement No. 26* (E/2013/46), chap. I, sect. B.

Recognizing the investments of Member States in developing satellite missions for positioning and remote sensing of the Earth, supporting a range of scientific endeavours that improve our understanding of the "Earth system" and underpin decision-making, and recognizing that the full societal benefits of these investments are realized only if they are referenced to a common global geodetic reference frame at the national, regional and global levels,

Recognizing with appreciation that some Member States are already implementing open geodetic data-sharing mechanisms for the benefit of realizing, improving and accessing the global geodetic reference frame at the national, regional and global levels,

Acknowledging that the global geodetic reference frame depends upon the participation of countries all around the globe, and the need to take action to strengthen international cooperation,

1. *Endorses* decision 3/102 of the Committee of Experts on Global Geospatial Information Management,[4] whereby a working group should be established, with equitable regional representation, to develop a global geodetic road map that addresses key elements relating to the development and sustainability of the global geodetic reference frame;

2. *Encourages* Member States and relevant international organizations to enhance global cooperation in providing technical assistance, especially for capacity development in geodesy for developing countries, with the aim of ensuring the development, sustainability and advancement of the global geodetic reference frame;

3. *Urges* Member States to implement open sharing of geodetic data, standards and conventions to contribute to the global reference frame and regional densifications through relevant national mechanisms and intergovernmental cooperation, and in coordination with the International Association of Geodesy;

4. *Invites* Member States to commit to improving and maintaining appropriate national geodetic infrastructure as an essential means to enhance the global geodetic reference frame;

5. *Also invites* Member States to engage in multilateral cooperation that addresses infrastructure gaps and duplications towards the development of a more sustainable global geodetic reference frame;

6. *Further invites* Member States to develop outreach programmes that make the global geodetic reference frame more visible and understandable to society;

7. *Recommends* the present resolution to the General Assembly for endorsement.

50th plenary meeting
17 November 2014